

CLAIMS:

1. A phosphate derivative of a phenolic hydroxy compound comprising the reaction product of the following steps:
 - (a) reacting the phenolic hydroxy compound with an alkyl $\alpha:\omega$ dialdehyde or a sugar-like polyhydroxy dialdehyde to form a hemiacetal;
 - (b) reducing the terminal aldehyde group on the product from step (a) to a hydroxyl group; and
 - (c) phosphorylating the hydroxyl group formed in step (b) to produce a phosphate derivative of the phenolic hydroxy compound.
2. The phosphate derivative of a phenolic hydroxy compound according to claim 1 having the structure of Compound (I) wherein R^1 , R^2 , R^3 , R^4 and R^5 may each independently be chosen from H or an alkyl group and n and m are independently in the range of 0 to 8.
3. The phosphate derivative of a phenolic hydroxy compound according to claim 1 having the structure of Compound (II) wherein R^1 , R^2 , R^3 , R^4 and R^5 may each independently be chosen from H or an alkyl group and R^6 , R^7 and R^8 can each independently be H or OH.
4. The phosphate derivative of a phenolic hydroxy compound according to claim 1 wherein the product of step (c) has been reacted with a complexing agent selected from the group comprising amphoteric surfactants, cationic surfactants, amino acids having nitrogen functional groups and proteins rich in these amino acids.
5. The phosphate derivative of a phenolic hydroxy compound according to claim 1 wherein the phenolic hydroxy compound is propofol or a derivative of propofol.
6. The phosphate derivative of a phenolic hydroxy compound according to claim 5 wherein the phosphate derivative of propofol has been reacted with a complexing agent selected from the group comprising amphoteric surfactants, cationic surfactants, amino acids having nitrogen functional groups and proteins rich in these amino acids.
7. The phosphate derivative of a phenolic hydroxy compound according to claim 6 wherein the complexing agent is arginine.

8. The phosphate derivative of a phenolic hydroxy compound according to claim 6 wherein the complexing agent is disodium lauryl-imino-dipropionate.
9. The phosphate derivative of a phenolic hydroxy compound according to claim 1 wherein the alkyl $\alpha:\omega$ dialdehyde or a sugar-like polyhydroxy dialdehyde is selected from the group consisting of gluteraldehyde, trihydroxy pentandial, glyoxal and mixtures thereof.
10. The phosphate derivative of a phenolic hydroxy compound of claim 1 wherein the phenolic hydroxy compound is selected from adrenaline, analgesics and mixtures thereof.
- 10 11. A method for preparing a phosphate derivative of a phenolic hydroxy compound comprising the steps of:
 - (a) reacting the phenolic hydroxy compound with an alkyl $\alpha:\omega$ dialdehyde or a sugar-like polyhydroxy dialdehyde to form a hemiacetal;
 - 15 (b) reducing the terminal aldehyde group on the product from step (a) to a hydroxyl group; and
 - (c) phosphorylating the hydroxyl group formed in step (b) to produce a phosphate derivative of the phenolic hydroxy compound.
12. The method according to claim 11 further comprising step (d) reacting the product of step (c) with a complexing agent selected from the group comprising amphoteric surfactants, cationic surfactants, amino acids having nitrogen functional groups and proteins rich in these amino acids.
- 20 13. The method according to claim 11 wherein the phenolic hydroxy compound is propofol or a derivative of propofol.
14. The method according to claim 13 comprising the further step of reacting the phosphate derivative of propofol with a complexing agent selected from the group comprising amphoteric surfactants, cationic surfactants, amino acids having nitrogen functional groups and proteins rich in these amino acids.
- 25 15. The method according to claim 14 wherein the complexing agent is arginine.
16. The method according to claim 14 wherein the complexing agent is disodium lauryl-imino-dipropionate.
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17. The method according to claim 11 wherein the alkyl $\alpha:\omega$ dialdehyde or a sugar-like polyhydroxy dialdehyde is selected from the group consisting of gluteraldehyde, trihydroxy pentandial, glyoxal and mixtures thereof.
18. A phosphate derivative of propofol or a derivative of propofol comprising the reaction product of the following steps:
- 5 (a) reacting propofol or a derivative of propofol with an alkyl $\alpha:\omega$ dialdehyde or a sugar-like polyhydroxy dialdehyde to form a hemiacetal;
- (b) reducing the terminal aldehyde group on the product from step (a) to a hydroxyl group; and
- 10 (c) phosphorylating the hydroxyl group formed in step (b) to produce a phosphate derivative of propofol or a derivative of propofol.
19. The phosphate derivative of propofol or a derivative of propofol according to claim 18 wherein the phosphate derivative from step (c) has been reacted with a complexing agent selected from the group comprising amphoteric surfactants, cationic surfactants, amino acids having nitrogen functional groups and proteins rich in these amino acids.
- 15 20. The phosphate derivative of propofol or a derivative of propofol according to claim 19 wherein the complexing agent is arginine.
21. The phosphate derivative of propofol or a derivative of propofol according to claim 19 wherein the complexing agent is disodium lauryl-imino-dipropionate.
- 20 22. The phosphate derivative of propofol or a derivative of propofol according to claim 18 wherein the alkyl $\alpha:\omega$ dialdehyde or a sugar-like polyhydroxy dialdehyde is selected from the group consisting of gluteraldehyde, trihydroxy pentandial, glyoxal and mixtures thereof.
23. A phosphate derivative of a phenolic hydroxy compound according to any one of claims 1 to 8 when used as a prodrug.
- 25 24. A phosphate derivative of a phenolic hydroxy compound according to any one of claims 1 to 8 when used as an anaesthetic.

25. A method for improving the bioavailability of a phenolic hydroxy compound comprising the following steps:
- (a) reacting the phenolic hydroxy compound with an alkyl $\alpha:\omega$ dialdehyde or a sugar-like polyhydroxy dialdehyde to form a hemiacetal;
 - 5 (b) reducing the terminal aldehyde group on the product from step (a) to a hydroxyl group; and
 - (c) phosphorylating the hydroxyl group formed in step (b) to produce a phosphate derivative of the phenolic hydroxy compound.